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09/364,835	07/30/1999	BAIJU V. PATEL	INTL-0182-US	9974

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TIMOTHY N TROP  
TROP PRUNER HU & MILES PC  
8554 KATY FREEWAY  
SUITE 100  
HOUSTON, TX 77024

EXAMINER

HA, LEYNNA A

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 04/22/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

pre

<b>Office Action Summary</b>	<b>Application</b> 09/364,835	<b>Applicant(s)</b> PATEL ET AL.	
	<b>Examiner</b> LEYNNA T. HA	<b>Art Unit</b> 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

1. Claims 1-27 has been re-examined and conferees find Applicant arguments persuasive over Examiner's rejection.

2. Prosecution is re-opened with new prior art and grounds of rejection.

Claims 1-27 is rejected under 35 U.S.C. 102(b) and is a Non-Final rejection.

**Response to Arguments**

3. ***In view of the*** Appeal Brief ***filed on*** February 9, 2004, **PROSECUTION IS HEREBY REOPENED**. Non-Final Office Action ***is set forth below***.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless –*

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**4. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Abadi, Et Al. (US 5,268,962).**

**As per claim 1:**

Abadi discloses a method for use in a device coupled to a communications channel, comprising:

determining a security service to perform with a data block; **(see col.3, lines 61-65 and col.4, lines 24-27)**

generating security information to pass along with the data block, the security information identifying the security service; and **(see col.4, lines 28-35 and lines 47-63)**

processing, in a computer peripheral device adapted to the communication with the communications channel, the data block according to the security information; **(see col.4, line 64 - col.5, line 33; the network controller 116 is considered as the claimed computer peripheral device because it is a computer component connected to the host computer D via the DMA interface.)**

**As per claim 2: see col.5, lines 7-33 and FIG.5a;** discusses performing cryptographic processing of the data block.

**As per claim 3: see col.6, lines 7-63 and FIG.3;** discusses receiving the data block from a software routine and routing the processed data block back to the software routine after processing.

**As per claim 4: see col.7, line 63 – col.9, line 3;** discusses determining if the security service can be performed by the computer peripheral device and if not, processing the data block according to the security service in a software routine instead of the computer peripheral device.

**As per claim 5: see col.3, lines 55-65;** discussing the Internet Protocol Security.

**As per claim 6:**

Abadi discloses a method for use in a device including a computer peripheral device adapted to control communication with a transport medium, comprising **(FIG.3):**

receiving data from a routine in the device; **(see FIG.5b and col.4, lines 47-58)**  
sending the data to the computer peripheral device to perform cryptographic processing. **(see col.5, lines 1-33 and col.8, lines 59-63; the network controller 116 is considered as the claimed computer peripheral device because it is a computer component connected to the host computer D via the DMA interface.)**

**As per claim 7: see col.5, lines 1-33;** discusses sending the data to the computer peripheral device at least one more time to perform further cryptographic processing.

**As per claim 8:**

Abadi discloses a method for use in a device including a computer peripheral device adapted to control communication with a transport medium, comprising:

receiving data from the transport medium; **(see col.5, lines 52-55 and FIG.5a)**  
determining from a portion of the data if cryptographic processing of the data is to be employed; and **(see col.3, lines 61-65 and col.4, lines 24-27)**  
performing, in the computer peripheral device, the cryptographic processing of data **(see col.5, lines 7-33; the network controller 116 is considered as the claimed computer peripheral device because it is a computer component connected to the host computer D via the DMA interface.).**

**As per claim 9: see col.5, lines 7-33 and FIG.5a;** discusses performing cryptographic processing is performed by a cryptographic engine in the computer peripheral device.

**As per claim 10: see col.7, line 63 – col.9, line 3;** discusses determining if the cryptographic processing can be performed by the computer peripheral device and performing the cryptographic processing in a software routine instead if the computer peripheral device is unable to perform the cryptographic processing.

**As per claim 11:**

Abadi discloses an article including a machine-readable storage medium containing instructions for execution in a system including a computer peripheral device adapted to control communication with a communications channel, the instructions when executed causing the system to **(FIG.3)**: identify a security service to be performed on data to be transmitted over the communications channel; and **(see col.5, lines 46-55)** prepare security control information to pass along with the data to the computer peripheral device to perform processing according to the identified security service. **(see col.5, lines 1-33 and col.8, lines 59-63; the network controller 116 is considered as the claimed computer peripheral device because it is a computer component connected to the host computer D via the DMA interface.)**

**As per claim 12: see col.7, line 63 - col.9, line 3;** discussing the instructions causing the system to perform processing according to the identified security service instead of the computer peripheral device if the security service cannot be performed by the computer peripheral device.

**As per claim 13:**

Abadi discloses an article including a machine-readable storage medium containing instructions for execution in a system including a computer peripheral device adapted to control communication with a communications channel, the instructions when executed causing the system to **(see FIG.3)**:

receive a data block from the computer peripheral device; **(see col.5, lines 52-55)**

determine from information in the data block if a security service has not been performed on the data block by the computer peripheral device ; and

**(see col.3, lines 61-65 1.6, line 66)**

process the data block if the security service has not been performed on the data block by the computer peripheral device. **(see col.5, lines 7-33 and col.8, line 59 – col.9, line 3; the network controller 116 is considered as the claimed computer peripheral device because it is a computer component connected to the host computer D via the DMA interface.)**

**As per claim 14: see col.7, line 63 – col.9, line 3;** discussing the instructions causing the system to retrieve security information associated with the data block and sent the data block and security information to the computer peripheral device to perform the security service.

**As per claim 15: see col.6, lines 7-63;** discussing the instructions causing the system to perform the security service on the data block.

**As per claim 16:**

Abadi discusses a controller for controlling communications with a transport medium **(see FIG.3)**, the controller comprising:

a receiving circuit to receive data and associated security control information;  
and **(see col.5, lines 46-55)**



a cryptographic engine to cryptographically process the data based on the security control information, the cryptographic engine being in the computer peripheral device. **(see col.5, lines 7-33 and col.9, lines 5-15; the network controller 116 is considered as the claimed computer peripheral device because it is a computer component connected to the host computer D via the DMA interface.)**

**As per claim 17:** Abadi discusses the storage device containing information identifying security services to be performed **(see col.3, lines 61-65 and col.4, lines 10-27)**, the received security control information selecting a portion of the security services information in the storage device **(see col.8 lines 3-44)**, wherein the cryptographic engine processes the data according to the selected portion of the security services information. **(see col.5, lines 7-33 and col.9, lines 5-15)**

**As per claim 18:**        **see col.8, lines 36-51;** discussing a device adapted to change the contents of the storage device to update the security services information. [it is inherent in the art that updating to make sure the system doesn't have outdated or unnecessary data and because updating inherently helps the security of a system further]

**As per claim 19:**        **see col.8, lines 36-51;** discussing a device adapted the security services information based on a predetermined replacement policy. [it is inherent in the art that a replacement policy to makes sure the system doesn't have outdated or unnecessary data that would cause the system to

slow down or takes longer period of time to process and because a replacement policy inherently further helps the security of a system]

**As per claim 20:**        **see col.8, lines 5-44;** discussing the security services information includes security association information.

**As per claim 21:**

Abadi discloses a device coupled to a communications channel, comprising:

an entity capable of generating data for transmission to the communications channel; and        **(see col.3, lines 61-65 and FIG.3)**

a computer peripheral device adapted to control communications between the entity and the communications channel **(see FIG.6)**, the controller including an engine to modify data according to the security protocol before transmitting the data to the communications channel.        **(see col.4, lines 24-66 and col.5, lines 46-55; the network controller 116 is considered as the claimed computer peripheral device because it is a computer component connected to the host computer D via the DMA interface.)**

**As per claim 22:** **see col.5, lines 7-33;** discusses the engine is adapted to perform cryptographic processing.

**As per claim 23:** **see col.4, lines 10-13 and FIG.3;** discussing network controller.

**As per claim 24:** **see FIG.3 and FIG.6;** discussing the application process.

**As per claim 25:** Abadi discusses a routine adapted to generate predetermined security information used by the engine (**see col.7, line 63 – col.9, line 3**) to modify the data according to the security protocol (**see col.3, lines 55-65**).

**As per claim 26:** Abadi discusses a controller (**see col.4, lines 10-13**) includes a receiving circuit to receive data from the communications channel and security data to identify (**see col.5, lines 52-55**) if the received data is subject to cryptographic processing. (**see col.5, lines 57-60**)

**As per claim 27:** **see col.6, lines 25-46 and FIG.6;** discusses a cryptographic engine to perform cryptographic processing on the received data.

***\*\*\*For further details and a better understanding of the rejections above, please refer to on Abadi, Et Al. on col.3, line 55...Et. SEQ. and its Figures.***

### **Conclusion**

**5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.**

PRESTON, ET. AL. (US 6,493,338)

SHIODA, Et Al. (US 6,484,318)

TSUKAMOTO, Et. Al. (US RE38,055)

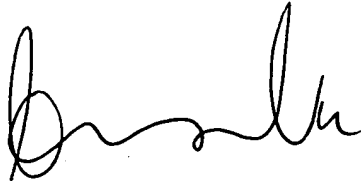
SHELL, Et. Al. (US 6,701,433)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (703) 305-3853. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LHa



LEYNNA T. HA  
Examiner